

## **REMARKS**

As procedural background, a formal Notice of Appeal was filed on Monday, February 11, 2008 so as to toll the time period running against this application based on the issues raised in the “final” Official Action dated September 10, 2007. Entry and consideration of the remarks and attachment presented with this response are therefore requested.

### **I. Response to 35 USC §103(a) Rejection**

The only issue remaining to be resolved in this application is the rejection of pending claims 1, 5 and 8-25 under 35 USC §103(a) based on Bayer (USP 6,566,486) in view of Johnston (USP 5,654,240). Applicants emphatically disagree.

The present invention is of course elated to blow-blowing of multilayer films, containing adjacent, if necessary with an intermediate adhesive layer, layers of polyamide and specific polyolefin. The specific polyolefin is LLDPE or PP to give certain functionality to the film; i.e. LLDPE gives tear strength and PP gives gloss.

The problem however, is that making blown film of such a combination of materials, which combination is known per se, causes problems: Film blowing a multilayer film of non branched polyamide + layer of LLDPE (tear strength) or layer of PP (gloss) provides for low bubble stability (see Comparative Experiment B on page 6 of the originally filed specification). Because of such bubble instability, blow-molded articles of such a known combination of materials are difficult to produce.<sup>1</sup>

There are the following known solutions to the problems noted above:

- (1) Add LDPE by admixture with the polyolefin; or

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<sup>1</sup> The Examiner will take Official Notice of the fact that the term “bubble” is a colloquial term used to reference the parison formed by blow-molding equipment downstream of the blow-molding die. See, for example, [http://en.wikipedia.org/wiki/Blow\\_molding](http://en.wikipedia.org/wiki/Blow_molding).

(2) Add a LDPE layer.

However, as to (1) the admixture of LDPE influences the properties of the polyolefin in an unwanted manner. As to (2), an extra layer makes the film blowing process more complex. These problems and know solutions are described at page 1 of the present application to which the Examiner's attention is directed.

Against this technical backdrop, the present invention provides for producing, by blow molding, a multilayer film having specific functionality (high tear strength or gloss) whereby the film bubble has high stability and the blow molding process can be effected at high throughput using, if present, only a minor (<5%) amount of LDPE.

The technical solution provided for by the present invention uses branched polyamide instead of non-branched polyamide in film blowing multilayer films containing adjacent, if necessary with an intermediate adhesive layer, layers of polyamide and PP or LLDPE with minor amounts (<5%) of another polyethylene.

The Examples and Comparative Experiments in the originally filed specification unequivocally demonstrate that the presence of LDPE when a conventional polyamide is used and the unexpected effect of using a branched polyamide in its stead, namely increased bubble stability (Comparative Experiment A and Example I; Comparative Experiment B and Example I) and blow ratio (Examples II and II) without using more than a minor amount of LDPE and thus safeguarding the functionality (tear strength or gloss) of the multilayer blown film. The attached Declaration of Ted Brink confirms such evidence.

It is noted that the Examiner apparently dismisses the data originally presented as "...the difference in Elmendorf tear strength of [Comparative Experiment A and Example 1] is 2 kN/m [and as such] this difference cannot unequivocally be attributed to the presence of lack thereof of branched polyamides." (Official Action at page 4, lines

18-20.) The Examiner's observation however focuses on only part of the evidence provided by such experiments. Specifically, while the Emendorf tear strengths of Comparative Experiment A and Example 1 are indeed comparable to one another when both branched and unbranched polyamides are in fact comparable, the bubble stability attributed to the former is much worse as compared to the latter. Thus, the fact that such processing improvements can be achieved while maintaining desired tear strength capabilities actually underscores the *unobviousness* of the present invention.

Turning attention to the applied references of record, applicants note that only in Bayer is blow molding for producing multilayer films addressed. However, Bayer does not disclose anything about film blowing a **multilayer** film having high tear strength/gloss that is at the same time able to be produced by blow molding with high bubble stability and at a high throughput without using more than a minor amount of LDPE. Thus Bayer does not really relate at all to the problems of bubble stability and/or film blowing production throughput, let alone in combination with safeguarding a certain functionality of the multilayer blown film without having to use more than a minor amount of LDPE.

The Johnston reference in this respect does not add anything that could be construed to supply the deficiencies of the Bayer reference. In this regard, while Johnston discloses that a PP layer and/or a LLDPE layer may be employed, the technique for making the multilayer sterilizable container is **laminating** the layers – **blow-molding** a multi-layer bubble. Johnston therefore is not concerned at all with blow molding and thus cannot provide any teaching of the problems associated with blow molding of multilayer films.

It is submitted with the utmost respect that an ordinarily skilled person when confronted with the problem of blow-molding multi-layer films would not turn at all to the teaching of Johnston. And just because Johnston may disclose a multi-layer film that may be made by laminating does not mean that an ordinarily skilled person would look

to blow-molding as a means to produce such a film as that person would already know the art-recognized problems attendant to blow-molding of multi-layer films as discussed above.

Johnston is therefore not analogous art to the presently claimed invention. In this regard, it is quite clear that the present invention and therefore not in the same technical field as the former relates to multilayer blow-molding techniques and the latter relates to lamination techniques. Thus, a skilled person working in the technical field of blow-molding would not be cognizant of Johnston because it related to the non-analogous field of multilayer film lamination.

Moreover, the present invention and Johnston are addressing different technical problems. Specifically, the present invention addresses the problem of making blow-molded articles, whereas Johnston is interested in making laminated articles.

The determination of whether or not a reference is from non-analogous art, and hence whether such art is available for use pursuant to an obviousness inquiry under 35 USC §103(a), is twofold. First, a determination must be made whether the art is from the same field of endeavor, regardless of the problem addressed, and secondly if the art is not within the same field of endeavor, a determination must be made whether it is still reasonably pertinent to the particular problem to be solved.<sup>2</sup>

In this particular situation, it seems quite clear that Johnston is not from the same field of endeavor as the present invention. Specifically, as noted above, Johnston is concerned with multilayer film lamination which is of course clearly not the same endeavor as blow molding of a multilayer film. Moreover, as also noted above, the problem confronted by Johnston is to provide multilayer laminate products. The problem confronting the present applicants is to solve the problem associate with the blow molding of multilayer films.

Therefore, Johnston is not analogous art to the presently claimed invention and, as such, is not properly combinable with Bayer to support a rejection under 35 USC §103(a) as it is not a part of the "content" of prior art of which the ordinarily skilled person in this particular technical field would be cognizant.

In view of the above remarks, the Declaration attached hereto and the remarks already advanced during prosecution to date, applicants suggest that all claims now pending in this application are in condition for allowance. Such favorable action is solicited.

## 2. Fee Authorization

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

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<sup>2</sup> *Wang Laboratories Inc. v. Toshiba Corp.*, 24 USPQ2d 1767, 1773 (Fed. Cir. 1993).